WA Code Potential Fossil Fuel Compliance Pathway

Jonlin revised draft 8/28/23

The only changes from last week are the values in the table, and those are relatively modest adjustments.

C401.2 Application. *Commercial buildings* shall comply with the Fossil Fuel Compliance Path according to Section C401.3, or with one of the following:

- 1. The requirements of Sections C402, C403, C404, C405, C406, C408, C409, C410 and C411.
- 2. The requirements of Section C407.
- 3. When adopted by the local jurisdiction, the requirements of Appendix F, Outcome-Based Energy Budget, Sections C408, C409, C410, C411 and any specific section in Table C407.2 as determined by the local jurisdiction. The Proposed Total UA of the proposed building shall be no more than 20 percent higher than the Allowed Total UA as defined in Section C402.1.5.

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<u>C401.3 Fossil Fuel Compliance Path.</u> Buildings complying with the Fossil Fuel Compliance Path shall comply with the prescriptive compliance path of this code as defined in Item 1 of Section C401.2, and as modified by this Section C401.3.

<u>C401.3.1 Modification of code requirements.</u> For use of this compliance path only, the following changes shall be made to this code:

- 1. <u>Section C403.1.4 space heating.</u> Strike the phrase "...or fossil fuel combustion..." from the first sentence of Section C403.1.4.
- 2. Section C404.2.1 service water heating. Revise the first sentence of Section C404.2.1 to read: "Service hot water shall be provided by fossil fuel appliances or an electric air-source heat pump water heating (HPWH) system meeting the requirements of this section or any combination of the two."
- 3. Section C406.2.5 renewable energy. When determining renewable energy credits in Equation 4-17 of Section C406.2.5, strike the phrase "...limited to 50 percent of the required credits in Section C406.1" in the definition of the factor AEC_{RRa}.
- 4. <u>Table C406.2 Efficiency Measure Credits.</u> <u>Use Table C406.2(FF) credit values in place of Table C406.2 credit values.</u>

C401.3.2 Fossil fuel equipment. Fossil fuel combustion appliances are permitted for HVAC heating, and shall comply with the applicable efficiency standards referenced in Section C403.3.3.2. Fossil fuel combustion appliances are permitted for service water heating, and shall comply with applicable efficiency standards referenced in Table C404.2.

C401.3.3 Additional efficiency credits. The number of additional efficiency credits required by Table C406.1 shall be increased by the number required in Table C401.3.3, modified as permitted in this section, and is in addition to the energy efficiency credits and load management credits required by Section C406.

<u>Table C401.3.3</u> <u>Additional Credits Required</u>

Occupancy group	<u>R-1</u>	R-2	В	<u>E</u>	M	All other
HVAC heating	7	<u>24</u>	<u>101</u>	38	<u>111</u>	<u>56</u>
Service water heating	<u>198</u>	212	<u>27</u>	<u>17</u>	<u>79</u>	<u>107</u>
Total credits	205	236	<u>177</u>	<u>55</u>	<u>190</u>	<u>163</u>

<u>C401.3.3.1 HVAC credit modification.</u> The number of HVAC heating energy efficiency credits required by Table C401.3.3 is permitted to be decreased according to the following equation:

 $CR = A - (A \times B/C)$

Where:

CR = additional credits required, rounded to the nearest whole number

A = baseline HVAC heating credits from Table C401.3.3

B = installed HVAC heating capacity in kBTU/h of HVAC heating appliances that comply with any of the exceptions to Section C403.1.4

C = total installed heating capacity in kBTU/h of all HVAC heating appliances

<u>C401.3.3.2 Service water heating credit modification.</u> The number of service water heating energy efficiency credits required by Table C401.3.3 is permitted to be decreased according to the following equation:

 $CR = A - (A \times B/C)$

Where:

CR = additional credits required, rounded to the nearest whole number

A = baseline credits from Table C401.3.3

B = installed service water heating capacity in kBTU/h of service water heating appliances that comply with any of the exceptions to Section C404.2.1

C = total installed service water heating capacity in kBTU/h of all service water heating appliances

Exceptions to Section C401.3.3

1. Low energy spaces in accordance with Section C402.1.1.1, equipment buildings in accordance with Section C402.1.2, unconditioned spaces, open parking garages, and enclosed parking garages that comply with sufficient measures from Table C406.2 to achieve a minimum of 50 percent of the efficiency credits required for new construction.

- 2. Building additions that have less than 1,000 square feet of conditioned floor area and that comply with sufficient measures from Table C406.2 to achieve a minimum of 50 percent of the efficiency credits required for additions.
- <u>C401.3.4 Renewable energy credit limit.</u> No more than 80 percent of the efficiency credits required by Sections C401.3.2.1 and C401.3.3.1 are permitted to be Renewable Energy credits defined in Section C406.2.5.
- <u>C401.3.5 Electrification readiness.</u> Dedicated circuits at the main building panel shall be provided with sufficient power to support future conversion of all fossil fuel-fired HVAC heating and service water heating appliances to electric heat pump appliances.